

STAT

April 13, 1956

K-20 Aerial Cameras**Camera Serial #GE-55-152 - Camera #1**

First flight. Single engine L-21
 Altimeter. Lighting poor - definition poor
 Thermometer lighting poor - definition poor
 Watch - lighting poor - definition poor
 Mechanical operation of camera first flight - good, but when loading the camera with film for second flight, the film would not advance by operating the film advance handle.

Camera Serial # GE-55-151, Camera #2

Second flight. L-21 Bi-motored engine airplane
 Altimeter. Hit and miss - over and under exposed
 Thermometer. Hit and miss - over and under exposed
 Watch. Improper angle. Hit and miss - over and under exposed
 Lens. Definition good
 Mechanical operation of camera - picture taking - good.
 Weather good. Sky blue, clear.

First flight. Helicopter single engine
 Altimeter. Over developed image.
 Thermometer. Over developed image
 Watch. Improper angle - off center, and over-developed image.
 Mechanical operation of camera - picture taking - good.
 Lens. Good Definition
 Weather. Good. Sky blue, clear.

Camera Serial #USN 43-4540, Camera #3

On the first flight in an L-21 single engine aircraft over Washington and Maryland, the picture taking portion of the film was functioning satisfactorily.

The instruments were recorded on the side of the film in the following manner:

Altimeter - Exposure good, definition good
 Thermometer - Exposure good, definition good
 Watch - Exposure under, definition fair
 Horizon - Exposure failed, definition none
 Lens, 6-3/8" - exposure good, definition good
 Mechanical operation of camera, good
 Light conditions, good. Sky blue, clear

Second flight. Bi-motor airplane
 Report same as first (1st) flight.

Camera Serial #JUN 42-2217, Camera #4

First flight - L-21, single engine airplane
Altimeter. Even lighting, definition good.
Thermometer. Uneven lighting, definition good, can be read
Watch. Uneven lighting, can be read. Definition good.
Horizon - was missing 19 times out of 50
Lens, 6-3/8" - definition good, clear
Mechanical operation - Format was incomplete 19 times out of 50
Lighting conditions. Good, sky clear, blue

Second flight. Bi-motor airplane
Altimeter. Lighting even, definition good
Thermometer. Lighting uneven, can be read
Watch. Lighting uneven, can be read
Horizon. Operated 30 times out of 50. Definition good
Lens, 6-3/8"
Mechanical operation of camera. No exposures were recorded on the picture format after 30 exposures were made, although film was run through for 50 exposures.
Light conditions good, sky blue, clear

CONCLUSIONS:

The cameras are not to be considered absolutely reliable, and need further adjustment and testing by Photomechanisms, Inc. Photomechanisms should submit at least one full roll of developed film from each camera showing instrument and picture recordings before payment.

RECOMMENDATIONS:

Return the four cameras to Photomechanisms for final adjustment.